

1    WHAT IS CLAIMED IS:

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3    1.    A spreader bar apparatus comprising:

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5        an elongate central member having a hollow interior;

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7        a pair of elongate end members, each elongate end member  
8        being partially disposed within the hollow interior so  
9        that a first portion of the elongate end member is  
10       disposed within the hollow interior and a second  
11       portion of the elongate end member is external to the  
12       hollow interior, the second portion of each elongate  
13       end member extending to a distal end; and

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15       a pair of sling guides, each sling guide being attached  
16       to the distal end of a corresponding elongate end  
17       member.

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19    2.    The spreader bar apparatus according to claim 1 wherein  
20    the first portion of each elongate end member has an end  
21    that is located within the hollow interior and wherein the  
22    ends of the elongate end members located in the hollow  
23    interior abut one another so as to cause compressive forces  
24    to be translated throughout the spreader bar apparatus.

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1 3. The spreader bar apparatus according to claim 1 wherein  
2 the elongate central member and is substantially tubular.

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4 4. The spreader bar apparatus according to claim 3 wherein  
5 each elongate end member is substantially tubular.

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7 5. The spreader bar apparatus according to claim 1 wherein  
8 the elongate end members are removably secured with the  
9 hollow interior of the elongate central member.

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11 6. The spreader bar apparatus according to claim 1 further  
12 comprising a locking system to prevent the elongate end  
13 members from being dislodged from the hollow interior.

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15 7. The spreader bar apparatus according to claim 6 further  
16 wherein the locking system comprises:

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18 a plurality of pairs of diametrically positioned openings  
19 in the elongate central member;

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21 a plurality of pairs of diametrically positioned openings  
22 in each elongate end member, each pair of diametrically  
23 positioned openings in each elongate end member being  
24 substantially aligned with a corresponding pair of  
25 diametrically positioned openings in the elongate

1       central member; and

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3       a plurality of pin members, each pin members being  
4       disposed through a corresponding pair of diametrically  
5       positioned openings in the elongate central member and  
6       a corresponding pair of diametrical positioned openings  
7       in one of the elongate end members.

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9    8.    The spreader bar apparatus according to claim 7 wherein  
10   each pin member has a distal end that is exposed when the  
11   pin member is disposed through the diametrically positioned  
12   openings of the elongate central member and elongate end  
13   members, the locking system further comprises a locking  
14   member that is fastened to the exposed distal end of each  
15   plurality of pin members to prevent each pin member from  
16   becoming dislodged from the diametrically positioned  
17   openings of the elongate central member and elongate end  
18   members.

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20   9.    The spreader bar apparatus according to claim 8 wherein  
21   the locking system further comprises a tie that has one  
22   portion attached to the elongate central member, another  
23   portion attached to a corresponding pin member, and a  
24   another portion attached to a corresponding locking member.

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1 10. The spreader bar apparatus according to claim 1 wherein  
2 each sling guide member comprises:

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4 a pair of guide plates arranged in a generally vertical  
5 orientation so as to contain a sling line therebetween;  
6 and

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8 a generally smooth and downwardly sloping surface between  
9 the guide plates for contacting the sling line during a  
10 lifting operation.

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12 11. The spreader bar apparatus according to claim 10  
13 wherein each sling guide member further comprises a pin  
14 member secured to the guide plates to maintain a sling line  
15 between the guide plates.

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17 12. The spreader bar apparatus according to claim 11  
18 wherein each sling guide member further comprises a locking  
19 pin member secured to the pin member to prevent the pin  
20 member from being dislodged from the guide plates.

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22 13. The spreader bar apparatus according to claim 12  
23 wherein each sling guide member further comprises a tie  
24 attached to the pin member, the locking member and one of  
25 the guide plates to prevent the pin member and the locking

1 member from being separated from the spreader bar apparatus.

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3 14. The spreader bar apparatus according to claim 1 wherein  
4 the elongate central member and the elongate end members are  
5 fabricated from metal.

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7 15. The spreader bar apparatus according to claim 14  
8 wherein the elongate central member and the elongate end  
9 members are fabricated from aluminum.

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11 16. The spreader bar apparatus according to claim 14  
12 wherein the elongate central member and the elongate end  
13 members are fabricated from steel.

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15 17. The spreader bar apparatus according to claim 16  
16 further including a non-corrosive coating one on the steel.

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18 18. The spreader bar apparatus according to claim 1 wherein  
19 the elongate central member and the elongate end members are  
20 fabricated from composite materials.

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22 19. A spreader bar apparatus comprising:

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24 an substantially tubular elongate central member having a  
25 hollow interior;

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2 a pair of tubular elongate end members, each elongate end  
3 member being partially and removably disposed within  
4 the hollow interior so that a first portion of the  
5 elongate end member is disposed within the hollow  
6 interior and a second portion of the elongate end  
7 member is external to the hollow interior, the second  
8 portion of each elongate end member extends to a distal  
9 end; and

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11 a pair of sling guides, each sling guide being attached  
12 to the distal end of a corresponding elongate end  
13 member; and

14

15 wherein the first portion of each elongate end member has  
16 an end that is located within the hollow interior of  
17 the elongate central member and wherein the ends of the  
18 elongate end member located in the hollow interior abut  
19 one another to cause a compressive force applied to the  
20 sling guides to be translated throughout the elongate  
21 central member and the elongate end members.

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23 20. The spreader bar apparatus according to claim 19  
24 further comprising means for securing the elongate end  
25 members to the elongate central member.

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1 21. The spreader bar apparatus according to claim 19  
2 wherein each sling guide comprises:  
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4 a pair of guide plates arranged in a generally vertical  
5 orientation so as to contain a sling line therebetween;  
6 and  
7  
8 a generally smooth and downwardly sloping surface between  
9 the guide plates for contacting the sling line during a  
10 lifting operation.

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